

IN THE CLAIMS:

Please amend Claims 1, 7 and 13, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

1. (currently amended) An image processing apparatus comprising:
a predetermined number of code converting units, each code converting unit configured to execute coding and decoding of image data, the predetermined number of code converting units comprising at least one of a hardware-implemented code converting unit and a non-transitory computer-readable medium, each code converting unit belonging to one of a plurality of code converting unit groups;

a plurality of request-source task units, each request-source task unit configured to issue a processing request to any one of the predetermined number of code converting units in a predetermined code converting unit group to perform a corresponding task, the number of request-source task units being greater than the predetermined number of code converting units and having priorities set in advance, wherein each request-source task unit having a high priority reserves one of the predetermined number of code converting units in the predetermined code converting unit group, and each request-source task unit having a low priority competes for at least one of a plurality of non-reserved code converting units in code converting unit groups other than the predetermined code converting unit group, the number of non-reserved code converting units being less than the number of request-source task units having the low priority; and

an assigning unit configured to assign:

i. when the processing request is received from one of the plurality of request-source units having the high priority, the code converting unit reserved by the request-source task unit to a task corresponding to the request-source task unit that issued the processing request, and

ii. when the processing request is received from one of the plurality of request-source units having the low priority and one of the plurality of non-reserved code converting units is an idle code converting unit, the idle code converting unit to the task corresponding to the request-source task unit that issued the processing request.

2. – 3. (canceled)

4. (previously presented) The apparatus according to claim 1, wherein said predetermined number of code converting units are constituted by software-implemented code converting units for executing code conversion by software and hardware-implemented code converting units for executing code conversion by hardware; and

when the processing request is received from one of the plurality of request-source units, said assigning unit assigns one of said software-implemented code converting units to the task corresponding to the request-source task unit that issued the processing request .

5. (original) The apparatus according to claim 4, wherein said request-source task units having the high priority are classified into a first unit group processed by said software-implemented code converting units and a second unit group processed by said hardware-implemented code converting units via said software-implemented code converting units.

6. (previously presented) The apparatus according to claim 5, wherein said hardware-implemented code converting units are adapted so as to be used by the request-source task units of said second unit group.

7. (currently amended) An image processing method comprising:
a processing-request issuing step of issuing a processing request to perform a corresponding task to any one of a predetermined number of code converting units in a predetermined code converting unit group, by any request-source task unit of a plurality of request-source task units the number of which is greater than the predetermined number of code converting units and having priorities corresponding to respective tasks[[,]];

a priority processing determination step of receiving the processing request and determining whether the processing request issued by the request-source task unit should be processed with priority, wherein each request-source task unit having a high priority causes one of the predetermined number of code converting units in the predetermined code converting unit group to be reserved, and each request-source task unit having a low priority competes for at least one of a plurality of non-reserved code converting units in code converting unit groups other than the predetermined code converting unit group, the number of non-reserved code converting units being less than the number of request-source task units associated with a processing request having the low priority; and

an assigning step of assigning:

i. when the processing request is received from one of the plurality of request-source units having the high priority, the code converting unit

reserved by the request-source task unit to a task corresponding to the request-source task unit that issued the request, and

ii. when the processing request is received from one of the plurality of request-source units having the low priority and one of the plurality of non-reserved code converting units is an idle code converting unit, the idle code converting unit to the task corresponding to the request-source task unit that issued the request.

8. – 9. (canceled)

10. (previously presented) The method according to claim 7, wherein said predetermined number of code converting units are constituted by software-implemented code converting units for executing code conversion by software and hardware-implemented code converting units for executing code conversion by hardware; and

when the processing request is received from one of the plurality of request-source units, said assigning step assigns one of said software-implemented code converting units to the task corresponding to the request-source task unit that issued the request .

11. (original) The method according to claim 10, wherein said request-source task units having the high priority are classified into a first unit group processed by said software-implemented code converting units and a second unit group processed by said hardware-implemented code converting units via said software-implemented code converting units.

12. (previously presented) The method according to claim 11, wherein said hardware-implemented code converting units are adapted so as to be used by the request-source task units of said second unit group.

13. (currently amended) A non-transitory computer-readable medium having an image processing program encoded thereon, the image processing program comprising:

program code for executing a processing-request issuing step of issuing a processing request to perform a corresponding task to any one of a predetermined number of code converting units in a predetermined code converting unit group, by any request-source task unit of a plurality of request-source task units the number of which is greater than the predetermined number code converting units and having priorities corresponding to respective tasks[[,]];

program code for executing a priority processing determination step of receiving the processing request and determining whether the processing request issued by the request-source task unit should be processed with priority, wherein each request-source task unit having a high priority causes one of the predetermined number of code converting units in the predetermined code converting unit group to be reserved, and each request-source task unit having a low priority competes for at least one of a plurality of non-reserved code converting units in code converting unit groups other than the predetermined code converting unit group, the number of non-reserved code converting units being less than the number of request-source task units associated with a processing request having the low priority; and

program code for executing an assigning step of assigning:

i. when the processing request is received from one of the plurality of request-source units having the high priority, the code converting unit reserved by the request-source task unit to a task corresponding to the request-source task unit that issued the request, and

ii. when the processing request is received from one of the plurality of request-source units having the low priority and one of the non-reserved code converting units is an idle code converting unit, the idle code processing unit to the task corresponding to the request-source task unit that issued the request.

14. – 15. (canceled)

16. (previously presented) The non-transitory computer-readable medium according to claim 13, wherein said predetermined number of code converting units are constituted by software-implemented code converting units for executing code conversion by software and hardware-implemented code converting units for executing code conversion by hardware; and

when the processing request is received from one of the plurality of request-source units, the program code for executing said assigning step includes code for assigning said software-implemented code converting units the task corresponding to the request-source task unit that issued the request .

17. (previously presented) The non-transitory computer-readable medium according to claim 16, wherein said request-source task units having the high priority are

classified into a first unit group processed by said software-implemented code converting units and a second unit group processed by said hardware-implemented code converting units via said software-implemented code converting units.